



Australian Government

Department of Industry

Department of Industry submission to

Defence Sub-Committee

**Joint Standing Committee on
Foreign Affairs, Defence and Trade**

**Inquiry into Government Support for
Australian Defence Industry Exports**

Department of Industry's Submission to the Defence Sub-Committee of the Joint Standing Committee on Foreign Affairs, Defence and Trade Inquiry into Government Support for Australian Defence Industry Exports

1. Summary

The Department of Industry (the Department) supports the Australian Government's efforts to drive economic growth, improve productivity and enhance industry competitiveness through:

- developing the skills of the Australian workforce and enhancing workplace productivity;
- supporting science and innovation and promoting the growth of industries of the future;
- encouraging private sector investment and creating new jobs; and
- improving regulation and reducing the burden and costs on businesses, including energy costs.

The vision of the Department is to enable growth and productivity for globally competitive industries, including Australia's defence industries. This is achieved through collaboration with Australian industry, employers, workers and other stakeholders.

The Department recognises the importance of globally competitive businesses to support the Australian defence effort, and as a part of the diversified economy.

The Department indirectly supports a range of services to improve outcomes for Australia's defence exporters.

The Department works closely with the Defence Materiel Organisation's (DMO) Australian Military Sales Office (AMSO), the Defence Export Control Office (DECO) and the Australian Trade Commission (Austrade) to maximise export opportunities for Australia's defence industry. The Department also actively engages with other stakeholders such as industry associations and state and territory governments to help facilitate the best outcomes for Australia's defence industry exporters.

This submission outlines the Department's support for Australian defence industry exports and provides some suggestions as to possible enhancements.

2. Key Challenges to Growth in Australia's Defence Industry

Advanced manufacturing technologies, processes and capabilities have been identified by the Australian Government as having significant growth opportunities for the development of high value-added products and services that are central to Australia's economic transformation, raising productivity growth and competitiveness, and offering high skill jobs.

Many industry sectors, including defence, utilise advanced manufacturing such as: advanced materials; precision manufacturing; information and communication technologies including robotics and automation, nanotechnologies; biotechnologies; and services inputs.

Many advanced manufacturing companies are well placed in global value and supply chains including those related to defence. Companies such as Quickstep Technologies, Marand, and Heat Treatment Australia, use their knowledge and expertise to capture value from the market by introducing new-to-firm, new-to-industry and new-to-world products, services, processes and ways of doing business.

Australian industry's support for the Australian Defence Force, and participation in defence programmes such as the F-35 Joint Strike Fighter, the Hobart Class Air Warfare Destroyer, and Collins Class submarine has helped establish advanced manufacturing capabilities within Australia's defence industries.

However, there are challenges for Australian companies engaged in advanced manufacturing, including those supporting defence. These include: leadership, management and entrepreneurial skills; access to, and retention of, skilled labour; workplace performance; access to finance; access to market-relevant ideas and intellectual property; ability to acquire and deploy new technologies and new ways of operating; high business input costs; competitive business environment; and regulatory impediments, including certification and qualification issues.

The Government's strategic priorities for transforming the economy that will assist in addressing these challenges include: improving the linkages between industry and research; creating an operating environment to grow business; improving information around access to global supply chains; reducing costs to doing business; and encouraging industry leadership in creating, finding and exploiting business opportunities.

The Government's and international demand for defence related goods and services provides opportunities for Australian advanced manufacturing companies to broaden their client base, demonstrate their capabilities to supply the stringent requirements of the global defence market, and to compete in the global supply chains of other multinational corporations. This effectively reduces the risk perceived by a prospective purchaser of their products in their bidding for supply contracts.

3. Relationship with the Defence Export Control Office

The Department is working closely with the Defence Export Control Office (DECO) and stakeholders in the research and defence industry sectors on the implementation of the *Defence Trade Controls Act 2012* (the Act).

The Department notes that DECO has undertaken a highly consultative approach with the research and industry sectors to address concerns and ensure appropriate implementation of the Act.

Due to significant stakeholder concerns regarding the impact of the Act, a steering group chaired by the Chief Scientist, Professor Ian Chubb AC, was established to oversee implementation, helping ensure it strikes the right balance, between national security on the one hand, and trade, research and international collaboration on the other. Implementation of the Act and activities of the steering group are subject to oversight by the Senate Standing Committee for Foreign Affairs, Defence and Trade.

4. Enhanced Defence Exports through Existing Programs

The Department provides indirect support to Australian defence industry exporters through mechanisms that include:

- Programmes that are funded by DMO;
- Provision of a range of generic industry and research programmes that assist the competitiveness of Australia's defence exporters; and
- Facilitation of export opportunities.

DMO engages with the Department for the deployment of a range of programmes. These include the Defence Industry Innovation Centre (DIIC), the New Air Combat Capability Industry Support Program (NACC-ISP), and the Defence Materials Technology Centre (DMTC).

DMO utilises the existing structures within the Department of Industry to simplify administration of these defence industry development programmes. Of the aforementioned programmes, NACC-ISP is the only one which is designed specifically to support an improved outcome for Australian defence exporters. However, both DMTC and DIIC indirectly support the competitiveness and capability of Australian industry, thereby helping to improve export outcomes.

Details of industry programmes that support Australia's defence industry exporters are as follows:

New Air Combat Capability Industry Support Program (NACC-ISP)¹

NACC-ISP commenced in August 2011 and has funding of \$8.2 million through to 30 June 2019. DMO has advised that further funding for the NACC-ISP was approved in the context of AIR 6000 Phase 2A/2B Second Pass approval in April 2014. NACC-ISP is jointly

¹ NACC-ISP website: <http://www.business.gov.au/advice-and-support/other-industry-support/Pages/NACC-ISP.aspx>

administered by the Defence Materiel Organisation – Joint Strike Fighter and the Department of Industry.

NACC-ISP supports the development of new or improved capabilities that may enhance the ability of Australian companies and research organisations to win work in the production, sustainment and follow-on development phases of the F-35 Lightning II Joint Strike Fighter (JSF) Programme.

Funding is offered on a competitive basis to eligible projects that rate highly against the merit criteria. Funding is offered on ratios of no more than 50:50 of eligible project costs. Depending on the funding stream, successful applicants can receive funding up to a maximum of: \$1 million under Stream A; \$250,000 under Stream B; and \$300,000 under Stream C.²

Since NACC-ISP commenced, as at 19 June 2014, 16 projects have been supported to the total value of just over \$6.4 million. A complete list of successful applicants is at **Attachment A**. The types of activities supported thus far have been mainly aimed at improving production processes in the moulding, milling, curing and coating industries. Other activities have been in areas of computing and information technology development.

As aircraft primes and original equipment manufacturers are located in the USA and Europe, most supply opportunities on the program are export related. To date, all projects supported under NACC-ISP have been in support of export opportunity outcomes on the JSF Programme³.

Defence Industry Innovation Centre (DIIC)

The Department of Industry's Defence Industry Innovation Centre (DIIC) was established in 2009 and is funded by the DMO for the benefit of the defence industry. The Centre provides a range of services designed to link small and medium defence businesses to new ideas, technologies and markets. The Centre aims to help businesses diversify to the defence sector, improve the performance of existing defence businesses, and prepare businesses for global defence opportunities.

To support the aims of Defence in ensuring sufficient capability and capacity for Australia's defence needs, the DIIC works to assist the industry by improving competitiveness, productivity and helping to give business the opportunity to engage in global supply chains. Since its establishment in 2009, the DIIC has interacted with over 655 Defence-related clients, and possesses considerable insight into the barriers and issues faced by small and medium businesses in and around the Defence space.

DIIC does not have a direct export assistance function. However one of the key objectives of the DIIC is to assist companies to become globally competitive and export ready. To that end, the DIIC offers the following:

²See **Attachment A** Page 10 for definitions for NACC-ISP streams.

³ The Department, together with the DMO, performs twice-yearly reviews of Australian industry participation in the JSF program with JSF prime contractors Lockheed Martin and Pratt & Whitney.

- Training and mentoring with regards to the US Defence Trade Controls (International Traffic in Arms Regulations (ITAR) and Export Administration Regulation (EAR));
- Provision of workshops and mentoring with respect to company presentation skills when pitching to an International Prime Contractor, or when attending tradeshows;
- The Supplier Continuous Improvement Program (SCIP) provides international benchmarking of Australian company capability in areas of value to international Defence primes. For those businesses specifically targeting exports, the DIIC developed an additional module for SCIP, called the Defence Export Excellence;
- Although the SCIP Program has relatively few completions, feedback to date reflects improvement in customer performance;
- The DIIC complements, and collaborates with, export focussed programmes such as the DMO Global Supply Chain Program, the DMO JSF Industry Support Program, Austrade, DECO, and with organisations such as the Export Finance and Insurance Corporation;
- Typically where these programmes identify opportunities the DIIC assists the SMEs to enhance their capabilities to meet the necessary requirements to win export contracts.

Given its mandate, the DIIC does not have any aggregate data highlighting specific export success. However, the DIIC has worked extensively with many prominently successful Defence exporters, such as Ferra Engineering, Microe, PHM Technologies, Levett Engineering, Iwebgate, Marand, Quickstep Technologies, and AW Bell.

In addition, the DIIC work with Defence primes suggest that an easy way does not exist for large businesses to map, manage and understand Australian industry capabilities and capacities. We note however, Defence's Defence + Industry Eportal⁴, and suggest that improvements could be made to this platform, which could then more easily provide relevant information for both large and small businesses to more effectively participate in defence supply chains.

Defence Materials Technology Centre (DMTC)

The Cooperative Research Centres (CRC) Programme is administered by the Department of Industry. The programme supports industry led research partnerships between publicly funded researchers, business and the community to address major long term challenges.

The Department has assisted the Department of Defence to oversee a selection round process under the Defence Future Capability Technology Centre (DFCTC) Programme which was based on the CRC Programme with the same basic principles but aims to develop defence technology for the Australian Defence Force.

Following the selection round the Department of Industry is managing the contract with the successful centre, the Defence Material Technology Centre (DMTC) Limited. DMTC was funded for 7 years from July 2008 through to June 2015. In March 2014 a further three years of funding was announced for the centre which will extend the Commonwealth Agreement to June 2018.

DMTC's mission is to develop and deliver advanced materials/manufacturing technology that is incorporated into Defence industry products and services, through collaborative research

⁴ Defence + Industry Eportal website: <http://www.dplusi.defence.gov.au/>

programmes led by industry that address emerging defence needs and industry commercialisation requirements.

The Department notes that technologies developed in collaboration with DMTC have, in some cases, also gone on to support successful Australian defence exports for companies including BAE Systems, Thales Australia and Bisalloy Steels.

Other programmes

The Department provides a range of generic non-industry specific programmes and services that provide outcomes that support the competitiveness of Australian Defence Industry exporters and include the Research & Development (R&D) Tax Incentive, and Tradex.

The Department of Industry is implementing a range of Government initiatives designed to build competitiveness, increase productivity and encourage exports for Australian manufacturers, including those which supply defence materiel.

R&D Tax Incentive

The Research and development (R&D) tax incentive provides a tax offset for eligible R&D activities and is targeted toward R&D that benefits Australia. The incentive, which came into effect on 1 July 2011 and replaces the R&D tax concession, is geared towards encouraging companies to engage in R&D. The programme is jointly administered by the Department and the Australian Tax Office.

Tradex

The Tradex Scheme allows an importer to gain an up-front exemption from Customs duty and GST on eligible imported goods that are intended for export. The goods may be exported in the same condition as imported, subjected to a process or treatment after importation, then exported or incorporated in other goods which are exported. Export may be carried out by the importer or a third party.

This scheme is applicable for defence exporters, as many of the input materials for manufactured defence items cannot be obtained domestically. Future Opportunities for Engagement with Australia's Defence Industry to Encourage Exports

Entrepreneurs' Infrastructure Programme (EIP)

The Entrepreneurs' Infrastructure Programme will provide a range of support for many small and medium sized enterprises to improve their business management skills including global supply chain engagement services, accessing and commercialising ideas for new products and services, processes and ways of doing business to build their competitiveness and growth, attracting new investments and creating new jobs. The programme will be delivered through the new streamlined Single Business Service initiative within the Department of Industry.

Building the capabilities, competitiveness and size of small and medium sized enterprises engaged in advanced manufacturing and services to compete in the global supply chains of other multinational corporations enables them to more effectively demonstrate their capabilities to meet the stringent requirements of the global defence market. This effectively reduces the risk perceived by a prospective purchaser of their products in their bidding for defence supply contracts and increases their export potential.

Australia is home to many globally competitive medium sized companies that have diversified and transformed themselves to compete in the global defence market by leveraging their participation in supplying Australia's demand for defence related goods and participation in Defence's Global Supply Chain Programme. These include: Marand, Quickstep, Ferra Engineering, Lovitt Technologies Australia, ANCA, Precise Advanced Manufacturing Group, Levett Engineering, Hofmann Engineering, and Varley Engineering.

Automotive Diversification Programme

The Automotive Diversification Programme will assist those Australian automotive supply chain firms capable of diversifying, to find new markets outside of the domestic motor vehicle manufacturing sector. This programme is a key element of the Government's Growth Fund, which is aimed at driving the development of new industries in high growth sectors.

Many automotive supply chain companies have leading-edge capabilities, technologies, practices and methods that could be applied to other types of manufacturing and services including those required by the defence market globally. The Programme will support Australian companies to invest in capital equipment as part of the company's diversification plan.

Next Generation Manufacturing Investment Programme

The Next Generation Manufacturing Investment Programme aims to accelerate private sector investment in capital projects to establish or expand their manufacturing operations into high value non-automotive manufacturing sectors in Victoria and South Australia. This programme is a key element of the Government's Growth Fund, which is aimed at driving the development of new industries in high growth sectors.

Many Australian manufacturers have leading-edge capabilities, technologies, practices and methods that can be applied to other types of manufacturing and services, including those required by the defence market globally.

Manufacturing Transition Programme

The Manufacturing Transition Programme is an Australia-wide programme that will assist Australian firms to invest in order to transform to higher value or niche manufacturing activities, including defence work.

The Programme will support firms to make this transition by building capability and improving firms' ability to compete in growth areas in global markets. Some of these markets could be defence related. Further, firms that build their capabilities and compete effectively in non-defence markets may be better able to transition into defence related manufacturing opportunities.

NACC-ISP Funded Projects

ATTACHMENT A

Applicant	Project description	Grant ⁵	Stream	Location
A.W. Bell Pty Ltd*	Supply of Electro Optic Distributed Aperture System (EODAS) chassis castings for the Joint Strike Fighter to Northrop Grumman Corporation	\$250,000	B	Vic
Agent Oriented Software Pty Ltd*	Information Broker for F-35 Interoperability demonstration with network centric infrastructure	\$250,000	B	Vic
BAS Melbourne Pty Ltd* (formerly Brenco Aerospace Pty Ltd)	High Velocity Oxygen Fuel (HVOF) wear resistant coatings for JSF landing gear actuator components	\$225,973	B	Vic
CSIRO – Titanium Technologies*	Thermally assisted machining of metals	\$1,000,000	A	Vic/Qld
Electromold Australia Pty Ltd*	JSF Airframe and related component non-destructive testing, surface treatment and finishing capability expansion	\$839,727	A	Vic
Ferra Engineering Pty Ltd*	Alternate Mission Equipment (AME) weapons adaptors production process improvement	\$250,000	B	Qld
Heat Treatment (Victoria) Pty. Ltd.	Aerospace and defence thermal processing in Victoria	\$197,629	B	Vic
Levett Engineering Pty Ltd*	Production process improvement of titanium airframe components for Lockheed Martin	\$232,932	B	SA
George Lovitt (Manufacturing) Pty Ltd	Increase competitiveness in the manufacture of JSF airframe components	\$250,000	B	Vic
Marand Precision Engineering Pty. Ltd.*	Developing Australia's low observable Airframe Manufacturing capability	\$1,000,000	A	Vic
Quickstep Operations Pty Ltd	Rapid, Low-Cost Curing of F-35 Carbon Fibre Composite Structures	\$1,000,000	A	NSW
Rockwell Collins Australia Pty Ltd	Establishment of a JSF EO DAS Optical Assembly Manufacturing Facility	\$250,000	B	Vic
TAE Gas Turbines Pty Ltd*	Production qualification for Harris Corporation F-35 JSF electronics enclosure	\$106,766	B	Qld
United Surface Technologies Pty Ltd*	Hydrogen based High Velocity Oxygen Fuel (HVOF) coatings capability for F35 JSF components and expanding metal surface treatment research facilities	\$224,069	B	Vic
Vipac Engineers and Scientists Ltd*	Acoustic monitoring of aircraft jet engines	\$250,000	B	SA/Vic
Micro Limited	Development and Manufacture of Microwave Electronic and Photonic products for Aerospace Applications	\$84,387	B	Qld
		<u>\$6,411,483</u>		

⁵ Includes variations to funding totals subsequently approved once the project was in progress. * Project is finalised

ATTACHMENT A
(Continued)

The NACC-ISP offers Australian industry and research organisations three streams of assistance:

- **Stream A:** Grants of up to \$1,000,000 over a period of no more than 36 months, for the development of a new or improved JSF technology, product, process or service that is required by entities within the JSF supply chain and which can demonstrate more than one JSF application
- **Stream B:** Grants of up to \$250,000 over a period of no more than 18 months, for the development of a new or improved JSF technology, product, process or service to enhance a company's competitiveness in winning work from entities within the JSF supply chain; or to engage in a study effort that relates to a capability required by entities within the JSF supply chain or the JSF Program Office.
- **Stream C:** Grants of up to \$300,000 with no more than \$100,000 per financial year, for a period of no more than 36 months, will be available for Australian universities, cooperative research centres (CRCs) or publicly funded research agencies (PFRAs), or a company controlled by one of these organisations, to undertake research effort assistance that leads to JSF industry capability enhancements or manufacturing improvements required by entities within the JSF supply chain or the JSF Program Office.

